



# **Nexus RF User Guide**

# Chapter 5 AC/ACR Website Interface Guide



Doc No: 29-00001 (Chapter 5)





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## Introduction

The Nexus® RF system provides a website based user interface to the operator via the Area Controller's (AC's) inbuilt website server.

The website interface provides all access to all monitoring, configuration and testing functionality of the system.

The AC's website server can be accessed, via any website browser capable device that can be connected to the systems backbone network.

The website page address required is the IP4 address of the AC. If the IP4 address for the AC is 10.224.5.2 then the appropriate website address will be http://10.224.5.2 (or https://10.224.5.2, see note 3 below).

The remainder of this chapter introduces the main pages of the website user interface required for the monitoring, configuration and testing of the system.

#### Notes:

- 1. All AC/ACR Controllers provide the website server functionality, so you can access the system by directing your browser to the IP4 address of any one of the sites controllers.
- 2. As the system is website server based, no specific PC software is required. The system can be accessed from any platform that provides website browser functionality, this includes i-Pad and android devices.
- 3. The old style AC/ACR devices only support http access to the website server, whereas the newer AC/ACR hardware utilises encrypted website access via https.
- 4. Ensure that the IP setting for your PC or laptops area connection is correctly setup on the correct network domain.





# **Nexus RF Introduction Page**

- On directing a website browser to an AC/ACR Controller you will be presented with the Nexus **Greeting** page, as shown in figure 1.
- To proceed to the **Login** page you need to click the mouse over the Stanilite®/Nexus icon.

# **Login Page**

- Access to the system is protected by a username/password login.
- The default username/password for the system is **nexus/nexustnb**.
- The **Login** page appears as per figure 2.
- After a successful login the **Domain** page is displayed.

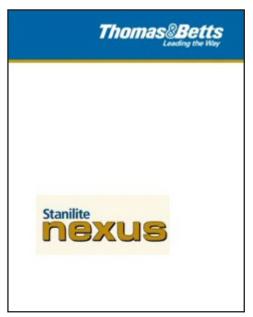


Figure 1 - Greeting Page



Figure 2 - Login Page





# **Domain Page**

The **Domain** page illustrated in figure 3, provides a complete summary of the system with regards to the state of the fittings, Routers and groups. It is effectively the **Home** page of the system and provides many navigation options to the other pages within the system. The following sections detail each of the main features presented on this page.

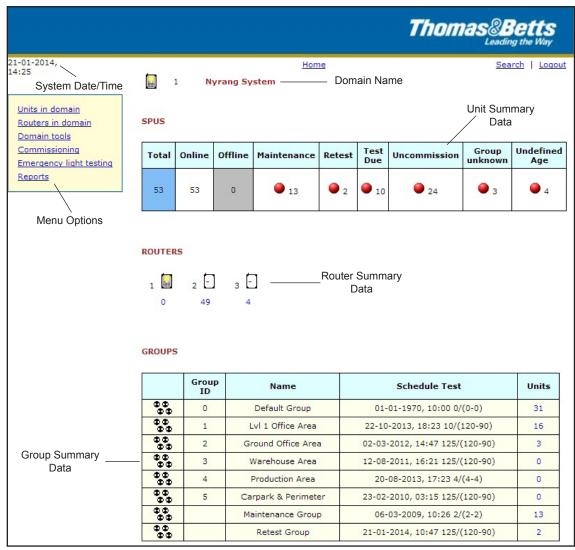


Figure 3 - Domain Page



## **Menu Options**

The following table details the function of the available menu functions.

Menu Option	Page Link
Units in Domain	Units in Domain page, refer page 7
Routers in Domain	Routers in Domain page, refer page 10
Domain Tools	Domain Tools page, refer page 13
Commissioning	Commissioning page, refer page 15
Emergency Light Testing	Emergency Light Testing page, refer page 17
Reports	Reports page, refer page 20

## **Unit Summary Data**

This section provides a summary of the unit status for the site, each field is described in the following table. Note: Some of the fault fields are only displayed if there are current fittings presenting with this fault, ie: Undefined Age.

Item	Description	Page Link
Total	Number of fittings in the system	Units in Domain page, refer page 7
Online	Number of fittings communicating correctly	Online Units page
Offline	Number of non-communicating fittings	Offline Units page
Maintenance	Number of fitting in the Maintenance Group	Maintenance Group page
Retest	Number of fittings in the Retest Group	Retest Group page
Test Due	Number of fittings overdue for their 6 monthly test	Test Due page
Uncommission	Number of uncommissioned fittings	Uncommissioned Units page
Two Day Offline	Number of fittings that have been continuously offline for > 2 days	2 Day Offline Units page
Duplicates	Number of fittings that have been incorrectly commissioned with duplicated SPU ID's	Duplicated Units page
Undefined Age	Number of fittings with invalid unit, lamp and/or battery ages	Undefined Age Units page

## **Router Summary Data**

This section displays the Routers in the system and the number of fittings that are currently meshed to each of these Routers. Selecting one of the Routers will result in the **Router Details** page (refer to page 21) being displayed for that Router.





## **Group Summary Data**

This section displays the **Maintenance**, **Retest**, **Default** and **User Defined Groups** in the system and the number of fittings that are currently allocated to each of these groups.

Column	Description	Page Link
1 - Group Tools Link	Link to the Group Tools page for this group	Group Tools page, refer page 18
2 - Group ID	Numeric group identifier	N/A
3 - Group Name	Name of the group	N/A
4 - Schedule Test	Previous/next group test date	N/A
5 - Units	Number of units allocated to the group	Units in Group page

Note: A fitting can only be allocated the Default or User Defined Groups at any point in time. As the Retest and Maintenance Groups are virtual a fitting may also be assigned to one of these groups in addition to its User Defined Group.



# **Units in Domain Page**

The **Units in Domain** page illustrated in figure 4, provides a graphical overview of the fitting status for all units in the domain. The following sections detail each of the main features presented on this page.

Note: Refer to appendix C for a description of the fitting icons and the meanings of their various colourings.

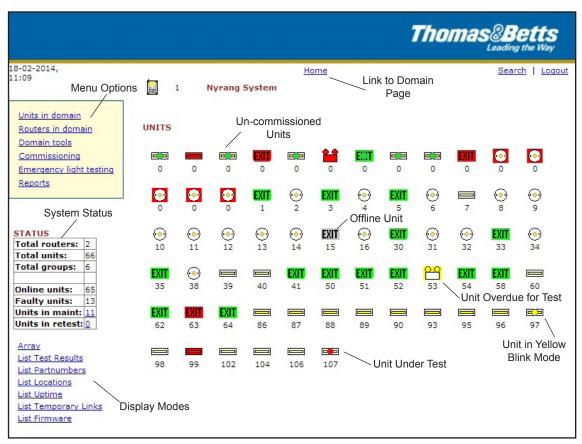


Figure 4 - Units in Domain Page

Clicking on a fitting results in the **Unit Details** page being displayed for this fitting, refer to page 23.

## **Menu Options**

Menu Option	Page Link
Units in Domain	Units in Domain page, refer page 7
Routers in Domain	Routers in Domain page, refer page 10
Domain Tools	Domain Tools page, refer page 13
Commissioning	Commissioning page, refer page 15
Emergency Light Testing	Emergency Light Testing page, refer page 17
Reports	Reports page, refer page 20





## **System Status**

This section provides a summary of the systems status, the fields are described in the following table.

Item	Description	Page Link
Total Routers	Number of Routers in the system	N/A
Total Units	Number of units in the system	N/A
Total Groups	Number of groups in the system, excluding the Retest and Maintenance Groups	N/A
Online Units	Number of units communicating correctly	N/A
Faulty Units	Number of units in fault	N/A
Units in Maintenance	Number of units in the Maintenance Group	Maintenance Group page
Units in Retest	Number of units in the Retest Group	Retest Group page

## **Display Modes**

The default display for the fittings on the **Units in Domain** page is the array view as illustrated in figure 4. Alternate list view options are available for displaying specific fitting information; please refer to figures 5 and 6 for samples of the list test results and list locations display modes.

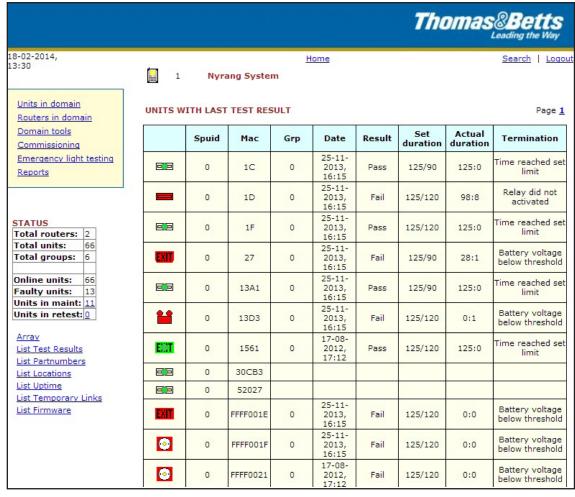


Figure 5 - List Test Results







Figure 6 - List Locations



# **Routers in Domain Page**

The **Routers in Domain** page as illustrated in figure 7, provides summary information for each of the Routers in the system. The following sections detail each of the main areas on this page.

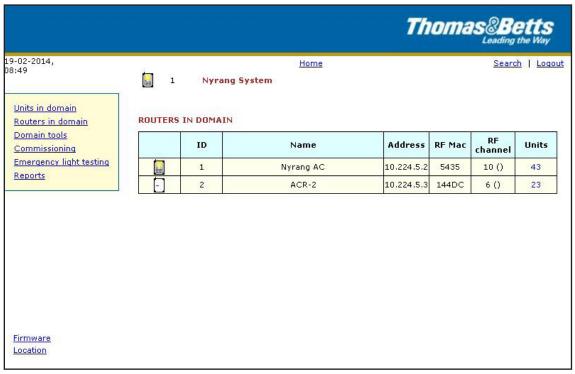


Figure 7 - Routers in Domain Page

## **Menu Options**

Menu Option	Page Link
Units in Domain	Units in Domain page, refer page 7
Routers in Domain	Routers in Domain page, refer page 10
Domain Tools	Domain Tools page, refer page 13
Commissioning	Commissioning page, refer page 15
Emergency Light Testing	Emergency Light Testing page, refer page 17
Reports	Reports page, refer page 20



#### **Routers in Domain**

The following information is displayed for each of the Routers in the system:

- Router ID
- Router Name
- · IP Address
- · The MAC address of its EIM card
- The RF channel for the EIM card, ie: 1 12
- · The number of units, currently meshed to the Router
- Router type, ie: AC, ACR, NAC or NACR

Selecting one of the Routers will result in the Router Details Page (refer page 21) being displayed for this Router.

## **Display Modes**

Alternate display mode options are available to display the Router firmware and location details, see figures 8 and 9.

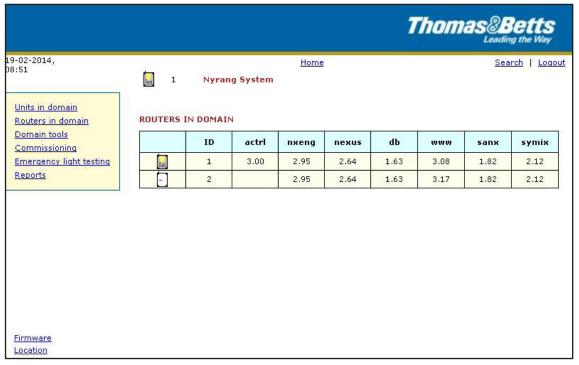


Figure 8 - Router FW Display Mode





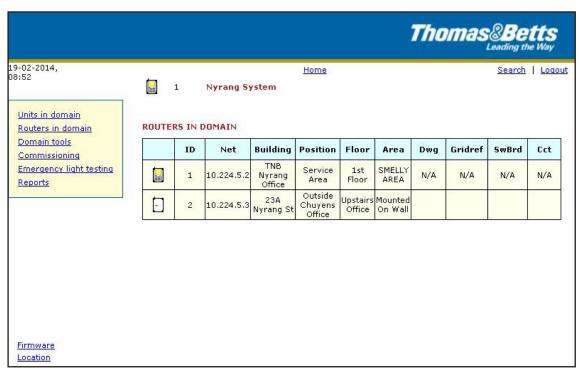


Figure 9 - Router Location Display Mode



# **Domain Tools Page**

The **Domain Tools** page as illustrated in figure 10, provides miscellaneous domain level functions. The following sections detail each of the main areas on this page.

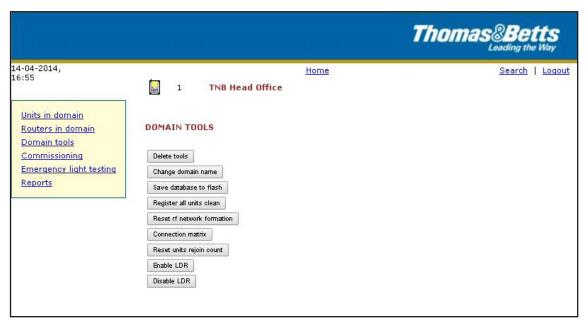


Figure 10 - Domain Tools Page

## **Menu Options**

Menu Option	Page Link
Units in Domain	Units in Domain page, refer page 7
Routers in Domain	Routers in Domain page, refer page 10
Domain Tools	Domain Tools page, refer page 13
Commissioning	Commissioning page, refer page 15
Emergency Light Testing	Emergency Light Testing page, refer page 17
Reports	Reports page, refer page 20



## **Domain Tools**

Function	Description
Delete Tools	Allows the deletion of Routers, groups and fittings from the system
Change Domain Name	Used to edit the systems domain name
Save database to flash	Reserved for Thomas & Betts service representatives
Register all units clean	Reserved for Thomas & Betts service representatives
Reset RF network formation	Reserved for Thomas & Betts service representatives
Reset units re-join count	Reserved for Thomas & Betts service representatives
Enable LDR	This is a system wide function that will enable LDR monitoring for all fittings that are fitted with an LDR
Disable LDR	This is a system wide function that will disable LDR monitoring for all fittings



# **Commissioning Page**

The **Commissioning** page as illustrated in figure 11, provides miscellaneous system commissioning functions. The following sections detail each of the main areas on this page.



Figure 11 - Commissioning Page

## **Menu Options**

Menu Option	Page Link
Units in Domain	Units in Domain page, refer page 7
Routers in Domain	Routers in Domain page, refer page 10
Domain Tools	Domain Tools page, refer page 13
Commissioning	Commissioning page, refer page 15
Emergency Light Testing	Emergency Light Testing page, refer page 17
Reports	Reports page, refer page 20



# **Commissioning Functions**

Function	Description
Commission my Router	Used to configure the Routers ID, name and IP address configuration parameters
Add neighbour Routers to domain	Used to add Routers to the system
Set date and time	Allows the system date, time and jurisdiction to be set
Commission Units	An alternative method for commissioning fittings
Download pre-commission file	Once a CSV commissioning file has been uploaded to the system, this initiates the commissioning process
Upload pre-commission file	Used to upload a CSV commissioning file up to the system
View pre-commission data	Can be used to view the previously uploaded CSV commissioning file data in the system



# **Groups in Domain Page**

The **Groups in Domain** page as illustrated in figure 12, provides summary information for the groups in the system. The following sections detail each of the main areas on this page.

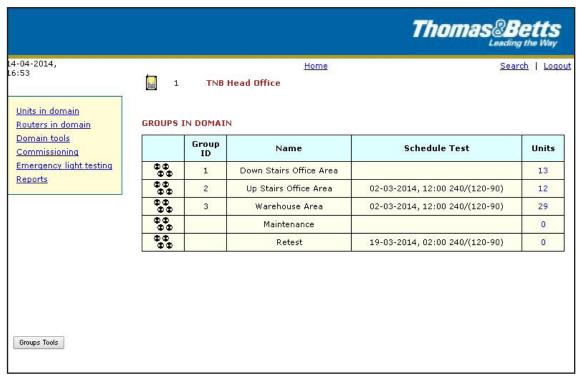


Figure 12 - Groups in Domain Page

## **Menu Options**

Menu Option	Page Link
Units in Domain	Units in Domain page, refer page 7
Routers in Domain	Routers in Domain page, refer page 10
Domain Tools	Domain Tools page, refer page 13
Commissioning	Commissioning page, refer page 15
Emergency Light Testing	Emergency Light Testing page, refer page 17
Reports	Reports page, refer page 20



## **Group Tools**

On pressing the **Group Tools** button, the following **Group Tools** are made available.

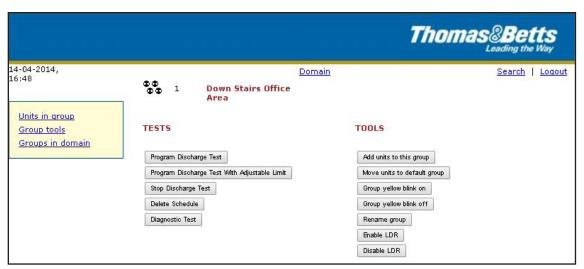


Figure 13 - Group Tools

Function	Description
Program Discharge Test	Allows a Discharge Test to be scheduled for the group, including the date or time for the test and its duration
Program Discharge Test with Adjustable Limit	Reserved for Thomas & Betts service representatives
Stop Discharge Test	This function can be used to abort a currently active Discharge Test on this group
Delete Schedule	This function clears the currently Scheduled Discharge Test for the group
Diagnostic Test	Allows all fittings within the group to put into a One Minute Diagnostic Test
Add unit to this Group	An array of units that are currently not allocated to this group are displayed. Multiple fittings can be selected via their check boxes for reallocation to this group. In the case of the Retest Group the fittings are simply flagged as being in the Retest Group and are not actually removed from their current group
Move units to Default Group	The Default Group is group ID 0. An array of the units currently allocated to this group are displayed. Multiple fittings can be selected via their check boxes for re-allocation to the Default Group. This function is not relevant for the Retest and Maintenance Groups
Group Yellow Blink On	Places all fittings within the group into the Yellow Blink Mode
Group Yellow Blink Off	All fittings within the group that are currently in Yellow Blink Mode, will be restored to normal operation
Rename Group	Allows the name for the group to be edited. This is not applicable for the Maintenance and Retest Goups
Enable LDR	All fittings within the group that are fitted with LDR's will have their LDR monitoring functionality enabled
Disable LDR	All fittings within the group will have their LDR monitoring functionality disabled



## **Program a Discharge Test**

On selecting the **Program Discharge Test** function, the operator will be presented with the **Program Discharge Test** page as illustrated in figure 14.

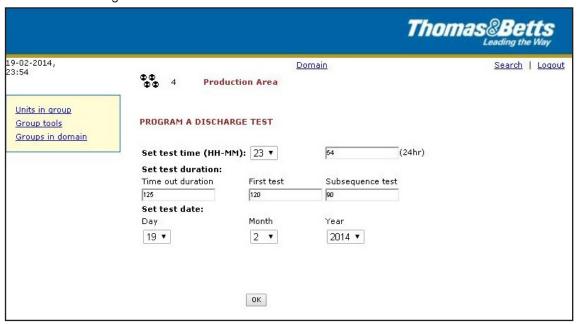


Figure 14 - Program Discharge Test Page



# **Reports Page**

The **Reports** page as illustrated in figure 15, provides access to the many system reports.

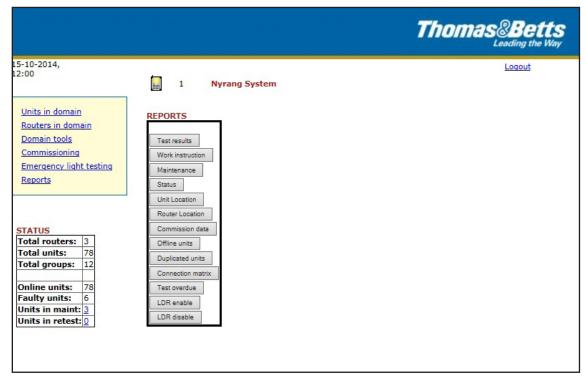


Figure 15 - Reports Page

## **Available Reports**

The following table details the available reports available from this page.

Report	Description	Filtering Options
Test Results	The latest fitting test results	All Units   Group   Unit
Work Instruction	Fittings in the system that require maintenance, ie: status faults or test failures (excludes offline fittings)	None
Maintenance	Fitting maintenance log entries	All Units   Group   Unit
Status	Can be used to generate a subset of units from the system that match a specific selection of criteria	Multiple selection criteria
Unit Location	Unit location details	All Units   Group   Unit
Router Location	Router location details	None
Commission Data	The fitting commission data that is in CSV format suitable for uploading into Excel	None
Offline Units	Units that are currently offline	None
Duplicated Units	Units that have duplicate SPU ID's	None
Connection Matrix	Reserved for Thomas & Betts service representatives	None
Test Overdue	Units that are currently overdue for a discharge test, this is based on a 6 monthly testing cycle	None
LDR Enable	Units that currently have their LDR enabled	None
LDR Disable	Units that currently have their LDR disabled	None





# **Router Details Page**

The **Router Details** page as illustrated in figure 16, provides summary information for the selected Router. The following sections detail each of the main areas on this page.

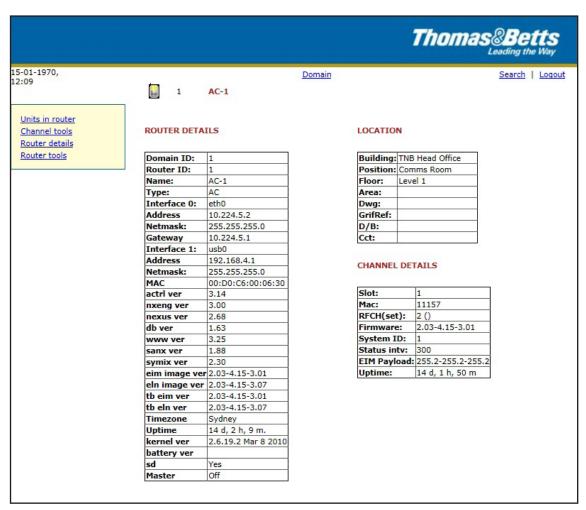


Figure 16 - Router Details Page

## **Menu Options**

Menu Option	Page Link
Units in Router	Provides a list of the units that are currently meshed to this Router
Channel Tools	Reserved for Thomas & Betts service representative
Router Details	This page
Router Tools	Provides tools for editing the Routers location details and service tools for upgrading the controller FW and symix tables





## **Router Details**

Details the following Router parameters:

- Router ID
- Router Name
- Router Type, ie: AC, ACR, NAC or NACR
- Ethernet IP address settings
- USB IP address settings
- Controller RW revisions
- · Timezone jurisdiction
- · The uptime of the Router

## Location

These fields represent the location details for this Router.

## **Channel Details**

Details the following RF module parameters and status:

- RF channel currently being used, ie: 1 12
- RF module RF revision
- · The Routers system ID
- The uptime of the RF module





## **Unit Details Page**

The **Unit Details** page illustrated in figure 17, provides a complete summary of a fittings configuration, communication status, current status, test results and maintenance history. The following sections detail each of the main areas on this page.

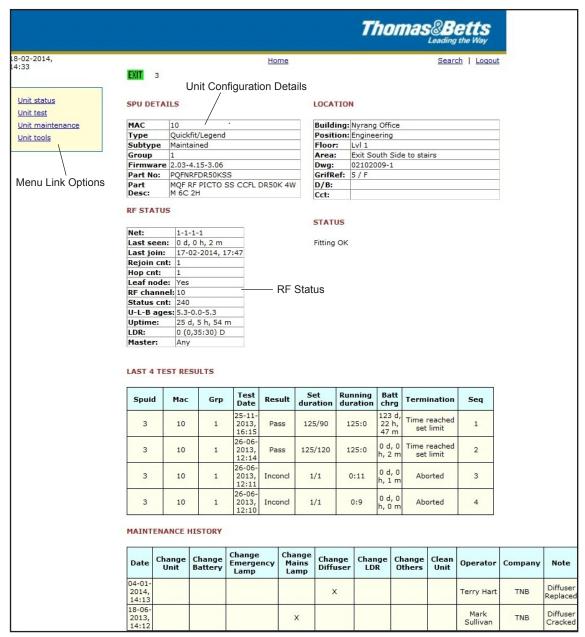


Figure 17 - Unit Details Page



## **Menu Options**

The following table details the function of the available menu functions.

Menu Option	Page Link
Unit Status	Unit Details page, refer page 23
Unit Test	Unit Test page, refer page 26
Unit Maintenance	Unit Maintenance page, refer page 28
Unit Tools	Unit Tools page, refer page 30

## **SPU Details**

The following table details SPU details entries.

Item	Description
MAC	The unique hardware ID of this fitting, ie: its MAC address
Туре	The unit type; Quickfit®, Legend, etc
Sub-type	The unit sub-type; maintained, non-maintained, etc
Group	The group ID to which this fitting is assigned
Firmware	The version of firmware loaded into the fitting
Part No.	The unit part number
Part Description	The unit description derived from the unit part number

## **RF Status**

The following table details RF status entries.

Item	Description
Net	The system address of the unit
Last Seen	Time since the unit last validly communicated with the system
Last Join	The date or time at which the unit last joined one of the systems mesh networks
Re-join Count	This field is no longer valid
Hop Count	This field is no longer valid
Leaf Node	A fitting is a leaf node if it does not have any downlinks to other fittings; yes, no
RF Channel	Which RF channel is this fitting communicating on; 1 - 12
Status Count	Reserved for Thomas & Betts service representatives
U-L-B Ages	The approximate unit, lamp and battery ages in years
Uptime	This is the time duration since the unit was last reset or power cycled
LDR	The state and current hysteresis levels for the fittings LDR, where appropriate
Master	This field is reserved for the future master function, ie: where you can select a specific controller to which this fitting is allowed to mesh

## Location

Each fitting has the eight location fields as illustrated in figure 17 to assist in uniquely defining its physical install location, its electrical circuit connection and any floor plan references.





#### **Status**

This represents the current status of the fitting which for different fitting types could include:

- The overall fitting status
- · Battery charging faults
- · Lamp faults
- · The state of the units switched active

## **Last Four Test Results**

This section displays the four most recent, production, diagnostic and discharge test results for the fitting.

## **Maintenance History**

This section displays the maintenance history entries for the fitting. Each maintenance entry record includes the following information:

- · The date of the maintenance action
- · General note section
- · Operator and company details for who performed the maintenance action
- · A series of selectable maintenance actions





## **Unit Test Page**

The **Unit Test** page as illustrated in figure 18, provides test result summary information for the fitting. The following sections detail each of the main areas on this page.

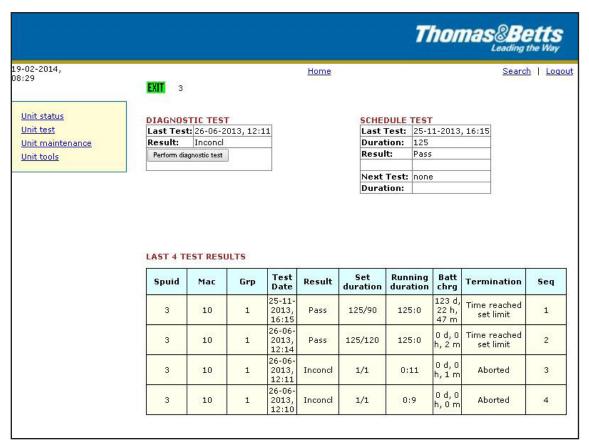


Figure 18 - Unit Test Page

## **Menu Options**

The following table details the function of the available menu functions.

Menu Option	Page Link
Unit Status	Unit Details page, refer page 23
Unit Test	Unit Test page, refer page 26
Unit Maintenance	Unit Maintenance page, refer page 28
Unit Tools	Unit Tools page, refer page 30

## **Diagnostic Test**

This section illustrates the date and result for this units most recent 1 minute diagnostic test. A button is also provided to initiate a new immediate diagnostic test on this unit.





## **Schedule Test**

This section provides details of the last discharge test for this unit and the date or time for the next pending group scheduled test (if applicable).

## **Last Four Test Results**

This section displays the four most recent, production, diagnostic or discharge test results for the fitting.





# **Unit Maintenance Page**

The **Unit Maintenance** page as illustrated in figure 19, provides a summary of the fittings maintenance history records. The following sections detail each of the main areas on this page.

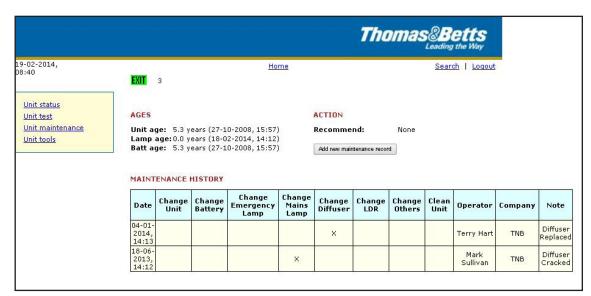


Figure 19 - Unit Maintenance Page

## **Menu Options**

The following table details the function of the available menu functions.

Menu Option	Page Link
Unit Status	Unit Details page, refer page 23
Unit Test	Unit Test page, refer page 26
Unit Maintenance	Unit Maintenance page, refer page 28
Unit Tools	Unit Tools page, refer page 30

## Ages

This section provides the individual ages and install dates for the unit, its lamp and battery. The lamp and battery install dates are updated in the system based on appropriate maintenance history records.

## **Maintenance History**

This is the equivalent of the log book maintenance record for a non-monitored systems fitting. All maintenance actions on a fitting should be recorded by an appropriate maintenance record entry.





#### **Add New Maintenance Record**

The **Add New Maintenance Record** button allows a new maintenance record to be added for a fitting. On pressing this button the **Add New Maintenance Record** page is displayed as in Figure 20.

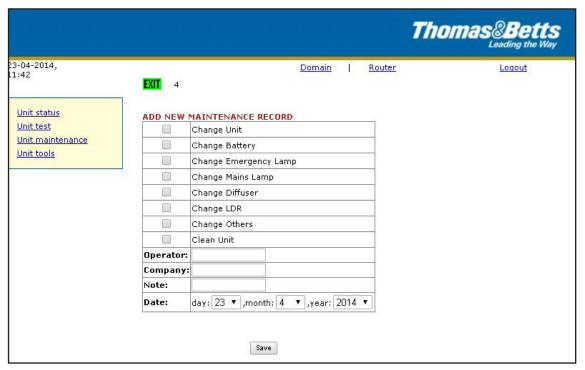


Figure 20 - Add New Maintenance Record Page



# **Unit Tools Page**

The **Unit Tools** page as illustrated in figure 21, provides a series of functions that can be performed on this fitting. The following sections detail each of the main areas on this page.

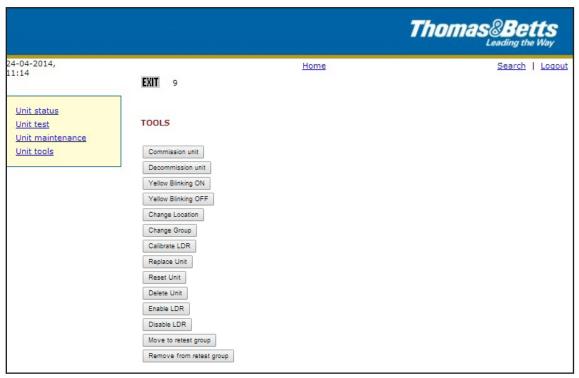


Figure 21 - Unit Tools Page

## **Menu Options**

Menu Option	Page Link
Unit Status	Unit Details page, refer page 23
Unit Test	Unit Test page, refer page 26
Unit Maintenance	Unit Maintenance page, refer page 28
Unit Tools	Unit Tools page, refer page 30





## **Fitting Functions**

The following table details the available fitting functions.

Item	Description
Commission Unit	This function allows a non zero SPU ID to be assigned to a fitting, ie: effectively commissioning the unit
De-commission Unit	This function de-commissions the fitting, ie: restores its SPU ID to 0
Yellow Blinking On	Sets the units status LED into a yellow blinking mode, signified by a yellow dot appearing on the fitting ===
Yellow Blinking Off	Restores the units status LED back to normal operation, ie: fitting status reporting
Change Location	Allows the various unit location parameters to be updated
Change Group	Allows the group assignment for the fitting to be changed, this does not include the Retest Group
Calibrate LDR	This function is only relevant for fittings that are fitted with an LDR and don't currently have their LDR monitoring functionality disabled. In this case the current light reading on the LDR will be calibrated to be 100%. The LDR is calibrated as part of the units production configuration or test process and hence should be rarely required on units in the field. This function should only ever be used on fittings that have been fitted with new lamps; ie: they are truly operating at 100% light output.
Replace Unit	Use this function to replace an offline faulty fitting with an online un-commissioned fitting, ie: a newly installed replacement fitting
Reset Unit	This function performs a hardware reset on the unit
Delete Unit	The Delete Unit function, flags the unit in the database as deleted from the system. It only makes sense to delete a fitting that has truly been removed from the system, as attempting to delete online fittings will only result in the fitting being removed from the system temporarily. Once the unit successfully communicates with the system it is effectively un-deleted.
Enable LDR	Enables the units LDR monitoring functionality, this is only relevant for fittings fitted with an LDR. The default behaviour for a units LDR monitoring is disabled.
Disable LDR	Disables the units LDR monitoring functionality
Move to Retest Group	This function allows the unit to be manually added to the Retest Group. Note: This in no way affects the units current test group assignment
Remove from Retest Group	Removes the unit from the Retest Group. Under certain status conditions for the fitting the system may well given time re-assign the fitting to the Retest Group, ie: inconclusive test results

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All technical claims in this document are based upon technical information available at the time of publication. This information may change over time and comparisons may therefore vary.

